REMARKS

Claims 11-23 were pending in this application when last examined. Claims 11-12, 17-19 and 21-23 are cancelled, claims 13-16 and 20 are currently amended and new claims 24-28 have been added. Claims 13-16, 20 and 24-28 will be pending upon entry of this amendment.

Support for the amendments can be found in the specification and in the original claims as filed. Support for new claim 24 can be found, for example, at page 5, lines 15-18, and in Figures 2-6 of the specification, and in original claims 12 and 17-19. Support for claim 25 can be found at page 11, lines 9-12, and in Figure 4. Support for claims 26-27 can be found at page 4, line 30 to page 5, line 13, and in Figures 5-6. Support for new claim 28 can be found at page 4, lines 27-28, page 11, lines 9-12, and in Figure 3.

No new matter has been added.

NEW CLAIM 24

New claim 24 replaces previous claim 11. Claim 24 is directed to the subject matter of previous claim 11 and further clarifies the combination and arrangement of the features of the claimed backsheet. As detailed in the remarks below, new claim 24 also includes additional features which distinguish over the cited references.

CLAIM REJECTIONS - 35 USC §103

At page 2, the Office Action rejects claims 11-12, 14-18 and 20-23 under 35 U.S.C. 103(a) as being unpatentable over BEWICK-SONNTAG et al. (US 6,232,521). Applicants respectfully traverse the rejection.

New claim 24 is directed to a breathable backsheet for an absorbent article that includes, in part, a first layer, a second layer adjacent the first layer, a condensation zone between the first layer and the second layer, and a hydrophobic distance element placed in the condensation zone creating a space between the first layer and the second layer. In addition, the condensation zone comprises an open volume between the first layer and the second layer and is adapted to temporarily condense and store a specific amount of water vapor ($t \cdot m_v$) defined in the claim. Even further, the hydrophobic distance element is arranged to condense water vapor within the condensation zone. BEWICK fails to teach or suggest a backsheet having this combination of features.

BEWICK describes a backsheet having at least two layers, a first layer comprising a gas permeable apertured polymeric film and a second layer comprising a gas permeable fibrous fabric layer. BEWICK also states that the "backsheet may comprise additional layers." (column 6, lines 8-9). The Office Action appears to conclude that this simple arrangement of two layers and potential additional layers describes a condensation

zone between the first layer and the second layer and a hydrophobic distance element placed in the condensation zone creating a space between the first layer and the second layer, as featured in the instant claims. Applicants respectfully disagree with this position.

BEWICK fails to teach or suggest a "condensation zone" between the first layer and the second layer. The Office Action appears to hold the position that any space between two layers constitutes a condensation zone. First of all, BEWICK, fails to describe any "space" between the two layers or between any of the layers. Indeed, BEWICK discloses that "all of the layers of the backsheet can be substantially in intimate and direct contact with one another" but fails to make any statements regarding the creation of a "space" between the layers. Also, while BEWICK makes one simple statement that the backsheet can "comprise additional layers" BEWICK fails to provide any additional information or explanation regarding what these additional layers do or how they are arranged in the backsheet. BEWICK fails to provide anything to teach or suggest to one of ordinary skill in the art that additional layers could be arranged to function as any type of condensation zone.

As recited in present claim 24, the condensation zone includes not just a space but also an "open volume" between the first layer and the second layer. Again, BEWICK fails to disclose anything regarding an "open volume" between the first and second

layers. In Figure 2, BEWICK illustrates a cross-sectional view of its backsheet (24). BEWICK labels the first layer (25) and the second layer (26), and shows the apertures (28) and protuberances (29), but fails to include any description or label any "space" or any "open volume" region. BEWICK fails to illustrate a "condensation zone" or a "hydrophobic distance element" or any "space between the first layer and the second layer" or any "open volume between the first layer and the second layer," all of which are featured in claim 24.

BEWICK describes a backsheet for an absorbent article that is designed with particular detail to the fluid contact angles and surface energy gradients of each the surfaces of the layers (*see,* column 2, lines 50-65). The specifics of the contact angles and energy gradients are detailed from column 6, line 57 to column 12, line 53. Essentially, BEWICK relies on these properties to design an absorbent article that exhibits a fluid contact angle gradient across the storage layer and back sheet. In other words, BEWICK is designed to function without use of any "condensation zone" adapted to temporarily condense and store an amount of water vapor. Despite providing all of this detail to describe various embodiments of its absorbent article, BEWICK never suggests any features that would serve as a "condensation zone" and never describes any "open volume" between the first layer and the second layer.

Moreover, including an open volume between the layers of the BEWICK article would disturb the detailed fluid contact angle gradient and destroy the functionality of the BEWICK article, thus rendering the BEWICK article unsatisfactory for its intended purpose. MPEP § 2143.01(V) states "[i]f proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification." *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984) (emphasis added). "If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious." *In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959) (emphasis added). Including an open volume between the layers would change the fluid contact angle gradient and change the principle of operation of the BEWICK article.

As detailed above, BEWICK utilizes fluid contact angles and surface energy gradients of the surfaces of the layers in contact with each other to block liquid transfer but transmit water vapor. BEWICK, however, fails to include any description or suggestion of a zone between the layers that could serve to "temporarily condense and store an amount of water vapor" as recited in claim 24. Quite simply, that is not how BEWICK works

and nothing in BEWICK teaches or suggests this aspect of the presently claimed backsheet.

Claim 24 also features a "hydrophobic distance element" arranged to condense water vapor within the condensation zone. BEWICK fails to teach or suggest this feature. While BEWICK discloses the option of having "additional layers," one of ordinary skill in the art would understand that any additional layers would also include contact angles and energy gradients designed to block liquid transfer and transmit water vapor. BEWICK discloses absolutely nothing regarding a hydrophobic distance element placed in a condensation zone and one of ordinary skill in the art would have no reason to contemplate the placement of such an element in BEWICK.

Moreover, the condensation zone in claim 24 is not merely an open volume. In conjunction with the hydrophobic distance element, the condensation zone is adapted to temporarily condense and store a specific amount of water vapor ($t \cdot m_c$), while allowing a flow of water vapor (m_x) to pass through the second layer without forming any condensation of water vapor on the outside of the backsheet. BEWICK merely discloses an optional additional layer.

In conjunction with the condensation zone, the first and second layers are adapted to allow specific amounts of mass flow water vapor to pass through the layers. The outer second layer allows less water vapor to pass through than the first

layer. Therefore, the difference in mass flow water vapor (the excess water vapor) condenses in the condensation zone with the aid of the hydrophobic distance elements. The second layer breathes out water vapor only in such an amount that there will be no condensation on the outside of the absorbent article, but the first layer allows a significantly higher mass flow water vapor due to the possibility of water vapor condensation in the condensation zone. As a result, the presently claimed backsheet solves two interconnected problems of too much moisture on the inside of the article, which could cause skin irritation, and the problem of condensation on the outside.

For all of these reasons, BEWICK fails to teach or suggest a breathable backsheet for an absorbent article comprising the arrangement of features as recited in claim 24. BEWICK would not have rendered obvious the backsheet of claim 24 and each of claims 13-16 and 20 dependent thereon. Accordingly, Applicants request reconsideration and withdrawal of the rejection.

CLAIM 19

At page 2, the Office Action rejects claim 19 under 35 U.S.C. 103(a) as being unpatentable over BEWICK in view of NODA et al. (US 2001/0044611). Applicants respectfully traverse the rejection.

Claim 19 has been cancelled thus rendering this rejection moot.

The features of claim 19, that the condensation zone comprises an open volume between the first layer and the second layer and the minimum distance between the first layer and the second layer is 0.1 mm, have been incorporated into claim 24. These features were addressed in the above remarks regarding BEWICK. Furthermore, NODA fails to provide any additional teaching to overcome the deficiencies of BEWICK as detailed in the above remarks. Accordingly, Applicants request reconsideration and withdrawal of this rejection.

NEW CLAIMS 25-28

Each of new claims 25-28 recite features that further distinguish over BEWICK. Claim 25 features a hydrophobic distance element in the form of a three dimensional net, an embodiment of which is illustrated in Figure 4. Claims 26-27 feature a hydrophobic distance element in the form of a layer comprising topographical features with raised portions and depressions on the distance layers, embodiments of which are illustrated in Figures 5 and 6.

Claim 28 features a plurality of hydrophobic particles in contact with the first layer and in contact with the second layer, an embodiment of which is illustrated in Figure 3. The Office Action comments at page 3, in regard to claim 13, that the

difference between BEWICK and claim 13 is the provision that the element comprises a number of particles but that it would have been obvious to provide a number of hydrophobic particles as opposed to the one particle taught by BEWICK. First of all, BEWICK fails to teach or suggest any "particle" or any "one particle" as asserted in the Office Action. Applicants respectfully request that the Office Action identify any such "hydrophobic particle" that would constitute a hydrophobic distance element. Secondly, claim 28 recites that the hydrophobic particles are in contact with the first layer and in contact with the second layer. BEWICK fails to teach or suggest any such backsheet.

For all of these reasons, BEWICK fails to teach or suggest, and fails to render obvious each of new claims 25-28.

CONCLUSION

Entry of the above amendments is earnestly solicited. Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

Should there be any matters that need to be resolved in the present application, the Examiner is respectfully requested to contact the undersigned at the telephone number listed below.

The Commissioner is hereby authorized in this, concurrent, and future submissions, to charge any deficiency or credit any overpayment to Deposit Account No. 25-0120 for any

additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

YOUNG & THOMPSON

_/H. James Voeller/_____
H. James Voeller, Reg. No. 48,015
209 Madison Street, Suite 500
Alexandria, VA 22314
Telephone (703) 521-2297
Telefax (703) 685-0573
(703) 979-4709

HJV/fb